

SEATING TOOL	CONNECTOR MOLDED KEY POSITION
1673943-1	4 - 5
1673943-2	11 - 12
1673943-3	12 - 13
1673943-4	5 - 6 or 10 - 11

Figure 1

## 1. INTRODUCTION

Seating Tool Assembly 1673943-[ ] is designed to seat Standard Edge II press-fit connectors with latches or mounting ears. The connectors contain compliant pin contacts to allow solderless pc board installation. Each seating tool is specifically designed for the number of contact positions and molded key position in the connector. Refer to Figure 1.

Read these instructions and understand them before using the seating tool.

### NOTE



*Dimensions on this sheet are in metric units [with U.S. customary units in brackets]. Figures are for reference only and are not drawn to scale.*

Reason for revision is given in Section 7, REVISION SUMMARY.

## 2. DESCRIPTION (See Figure 1)

The seating tool consists of an adapter, center plate, and two side plates.

The adapter provides a surface to accept the force applied by the application tooling to seat the connector onto the pc board. During seating, the center plate enters the connector card slot. This plate contains a key slot that fits over the connector molded key. The side plates feature blades that enter the connector contact cavities. Together, these parts support the contacts and prevent them from pushing out of the connector.

### 3. REQUIREMENTS

#### 3.1. PC Board Support Fixture (Customer Supplied)

A pc board support must be used to provide proper support for the pc board and alignment of the seating tool to the contacts, and to protect the pc board and connector from damage. The board support fixture must be designed for specific needs using the recommendations in Instruction Sheet 408-6927.

#### 3.2. Application Tooling

Power for the seating tool must be provided by an application tool (with a ram) capable of supplying a downward force of 222.4 N [50 lb] per contact. Manual Electric Servo Presses (CMP 6T) 1585699-8 and (CMP 12T) 1585698-8, and Bench Top Electric Servo Press (CBP 5T) 1585696-9 are available for this seating tool.

For information on the presses, visit the press-fit assembly equipment website at <http://tooling.te.com/pressfit.asp>.



*Over-driving of the connector will deform parts critical to the quality of the connection. Maximum force occurs prior to the connector bottoming on the pc board.*

### 4. SEATING (See Figure 2)

When setting up equipment to seat connectors, pay particular attention to the following:

- the seating tool must be matched to the connector
- the seating tool, connector, and applicator ram must be properly aligned before cycling the application tooling



*If the tool and connector are mismatched or are improperly aligned, damage could occur to the tooling, connector, or both.*

Proceed as follows:

1. Place the pc board on the pc board support fixture.
2. Place the connector on the pc board so that the contacts are aligned and started into the matching holes in the pc board.
3. Position the seating tool over the connector so that the blades align with the contact cavities and the key slot aligns with the molded key. Then lower the seating tool onto the connector until the seating tool bottoms on the connector.
4. Center the seating tool (with the connector) under the ram of the application tooling. Lower the ram slowly until it just meets the seating tool. Verify alignment of pc board support, pc board, connector, and seating tool.



*Damage to the pc board, seating tool, or connector may occur if the seating tool is not properly seated in the connector before cycling the application tooling.*

5. Cycle the application tooling to seat the connector on the pc board. Then retract the ram and carefully remove the seating tool by pulling it straight from the connector.
6. Check assembly for proper seating according to the following:
  - a. the connector standoffs are fully seated on the pc board
  - b. the widest section of each compliant pin is inside its intended pc board hole

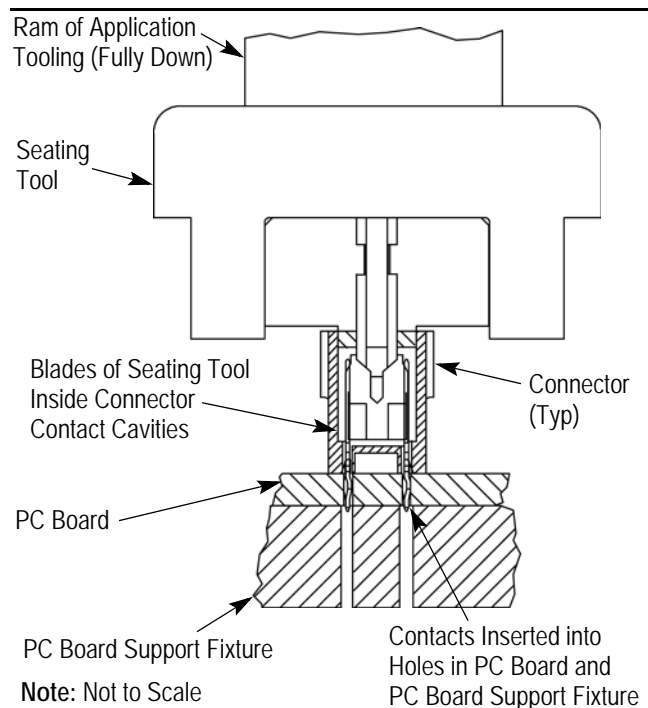


Figure 2

### 5. MAINTENANCE AND INSPECTION

The seating tool is assembled and inspected before shipment. It is recommended that the seating tool be inspected immediately upon arrival at your facility to ensure that the seating tool has not been damaged during shipment, and that the seating tool conforms to the dimensions provided in Figure 3.

#### 5.1. Daily Maintenance

It is recommended that each operator be made aware of, and responsible for, the following steps of daily maintenance:

1. Remove dust, moisture, and contaminants with a clean, soft brush or a lint-free cloth. DO NOT use objects that could damage the seating tool components.

2. When the seating tool is not in use, store it in a clean, dry area.

**5.2. Periodic Inspection**

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the seating tool or be supplied to personnel responsible for the seating tool. Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.

**6. REPLACEMENT AND REPAIR**

Customer-replaceable parts are listed in Figure 3. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by TE Connectivity to ensure quality and reliability.

Order replacement parts through your TE Representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

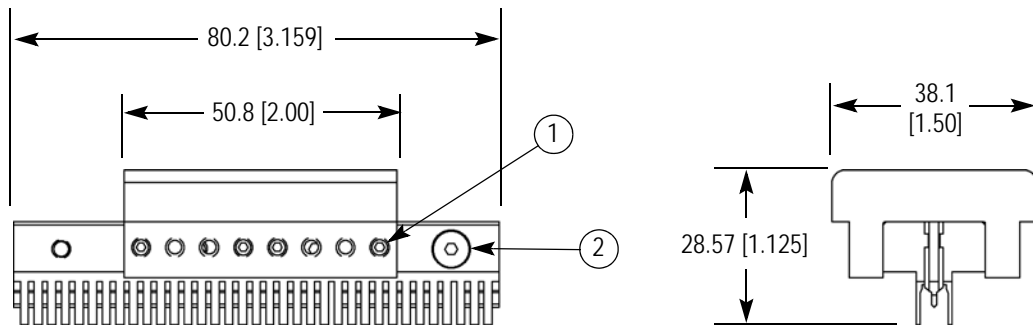
CUSTOMER SERVICE (038-035)  
 TYCO ELECTRONICS CORPORATION  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

For customer repair service, call 1-800-526-5136.

**7. REVISION SUMMARY**

Since the previous version of this document, the following changes were made:

- Revised Paragraph 3.2 to current procedure.
- Updated document to corporate requirements.



**REPLACEMENT PARTS**

ITEM	PART NUMBER	DESCRIPTION	QUANTITY PER TOOL
1	2-21012-8	SCREW, Socket Set, 6-32 x 0.25 in.	4
2	1-21002-9	SCREW, Button Head Cap, 6-32 x 0.625 in.	4

Figure 3